In the Claims:

1-23. (Cancelled)

24. (Previously Amended) A system for predicting likely liver toxicity as a side effect of application of a pharmaceutical substance, the system comprising:

an input device for obtaining blood levels of ALT and AST respectively,

a comparator, associated with said input device for comparing said respective levels of ALT (alanine aminotransferase) and AST (aspartate aminotransferase) to produce a ratio of said levels,

a predictor associated both with said input device and said comparator, and including a statistical model, for predicting, from application of said levels and said ratio therebetween to said statistical model, a likelihood of development of liver toxicity, said predictor set to conclude from low ALT and AST levels and a ratio close to 1, that a likelihood of development of liver toxicity is low, and

a thresholder for setting a threshold likelihood, above which application of said pharmaceutical substance is to be discontinued.

25. – 27. (Cancelled)